IN THE CLAIMS

1. (Currently amended) A control system for controlling automated applications in a building environment comprising:

a communications network;

a plurality of application controllers connected to said communications network, each of said application controllers including means for controlling operation of a corresponding automated device, each of said application controllers ~~including~~ having a controller type;

a control interface connected to said communications network, said control interface including a database ~~of~~ having at least one profile ~~for an application~~ associated with at least one controller type; and

self-configuration means for providing automated configuration of each of said application controllers on said communications network, said self-configuration means including means for conveying said controller type ~~of said application controller~~ from ~~said~~ a first application controller, the first application controller being one of the plurality of application controllers, to said control interface, said self-configuration means further including means for configuring said first application controller based on said profile corresponding to said controller type ~~of said application controller~~.

2. (Original) The control system of claim 1 wherein each of said application controllers controls operation of said corresponding automated device in accordance with at least one variable; and

wherein said control interface includes means for controlling operation of said application controller by specifying a value of said variable.

3. (Original) The control system of claim 2 wherein said database of at least one profile for a controller type is further defined as including a plurality of profiles for application controllers of different controller types.

4. (Currently amended) The control system of claim 3 wherein said control interface includes means for transmitting explicit messages to said application controllers, each of said explicit messages including an identification unique to a specific one of said application controllers; and

said application controllers each including receiving means for receiving said explicit messages from said control interface, said receiving means ~~for receiving~~ including means for recognizing only those of said explicit messages which include an identification unique to said application controller in which said means for receiving resides.

5. (Currently amended) The control system of claim 4 wherein said means for transmitting an explicit messages include means for incorporating said value of said variable into said explicit message.

6. (Original) The control system of claim 5 wherein said database ~~of profiles~~ includes input, output and configuration data structures for said application controllers.

7. (Original) The control system of claim 6 wherein each of said application controllers include an occupancy status;

said control interface including means for grouping a plurality of application controllers into an occupancy group; and

means for defining said occupancy status of each of said application controllers in a given occupancy group as a group.

8. (Original) The control system of claim 7 further comprising a network server interface, said network server interface including means for monitoring and controlling operation of said control system over an Internet connection.

9. (Original) The control system of claim 4 wherein said control interface includes means for monitoring a status of each of said application controllers, said means for monitoring including a means for periodically transmitting a ping to each of said application controllers and a means for receiving a response to said ping from each of said application controllers.

10. (Original) The control system of claim 9 wherein each of said application controllers includes a means for receiving said ping from said control interface and a means for transmitting a response to said ping to said control interface.

11. (Original) The control system of claim 4 wherein said plurality of application controllers includes at least one HVAC application controller, at least one lighting application controller and at least one access control application.

12. (Currently amended) The control system of claim 4 wherein said ~~local~~ control interface further includes:

a database of application controller control software images; and

means for downloading said control software images into at least one of said application controllers.

13. (Currently amended) The control system of claim 12 further comprising means for downloading said application controller control software images into said ~~local~~ control interface from an external source, whereby said application controller control software images can be upgraded.

14. (Currently amended) The control system of claim 13 wherein at least one of said application controllers is preprogrammed with basic networking and configuration software enabling said at least one application controller to receive and install said application controller control software images downloaded by said ~~local~~ control interface.

15. (Currently Amended) The control system of claim 4 wherein said ~~local~~ control interface further includes means for downloading a ~~local~~ control interface control software image into said ~~local~~ control interface.

16. (Currently amended) The control system of claim 15 further comprising means for downloading said ~~local~~ control interface control software image into said ~~local~~ control interface from an external source, whereby said ~~local~~ control interface control software images can be upgraded.

17. (Currently amended) The control system of claim 16 wherein at least one of said ~~local~~ control interface is preprogrammed with basic networking and configuration software enabling said ~~local~~ control interface to receive and install said ~~local~~ control interface control software image downloaded by said ~~local~~ control interface.

18. (Currently amended) The control system of claim 4 wherein at least one of said ~~local~~ control interface and said application controllers is preprogrammed with a generic programming language and includes means for downloading a control program to be run by said programming language to define operation of at least one of said ~~local~~ control interface and said application controllers.

19. (Currently amended) A control system for automated applications in a building environment comprising:

a communications network;

a plurality of application controllers connected directly to said communications network, each of said application controllers providing automated operation of a corresponding application, each of said application controllers being capable of providing automated operation of said corresponding application in accordance with a plurality of control variables; and

a control interface connected to said communications network, said control interface including means for transmitting explicit messages by way of an explicit address to each of said application controllers, said explicit messages including commands for adjusting ~~said~~ the plurality of control variables of said plurality of application controllers;

wherein each of said application controllers includes means for processing said commands received from said control interface in said explicit messages and means for adjusting a value of ~~said~~ the plurality of control variables in accordance with said command, whereby said control interface is capable of controlling operation of said application controllers.

20. (Currently amended) The system of claim 19 wherein said application controllers include application controllers of a plurality of different controller types;

said control interface including a preprogrammed database containing at least one profile, said profile defining ~~said~~ the plurality of control variables for said one of said controller types.

21. (Currently amended) The system of claim 20 wherein said preprogrammed database containing a plurality of profiles, each of said profiles being uniquely associated with one of said controller types and defining ~~said~~ the plurality of control variables for said one of said controller types.

22. (Original) The system of claim 20 wherein said controller types include at least an HVAC controller type, a lighting controller type and an access controller type.

23. (Original) The system of claim 22 further comprising a network server interface, said network server interface including means for monitoring and controlling operation of said control system over an Internet connection.

24. (Currently amended) The system of claim 23 wherein said control interface includes a means for periodically transmitting by way of explicit addressing a ping to each of said application controllers and a means for receiving a response to said ping from each of said application controllers.

25. (Currently amended) The system of claim 24 wherein each of said application controllers includes a means for receiving said ping from said control interface and a means for transmitting a response to said ping directly to said control interface.

26. (Currently amended) The system of claim 25 wherein said ping for at least one of said application controllers includes data for updating said application controller with current system information, said application controller including means for updating certain of ~~said~~ the plurality of control variables in accordance with said current system information.

27. (Currently amended) The system of claim 26 wherein said response transmitted by at least one of said application controllers includes data relevant to at least one other of said application controllers, said control interface including means for transmitting by way of explicit addressing said data included in said response to said other of said application controllers.

28. (Original) The system of claim 27 wherein said control interface includes means for generating an alarm if any of said application controllers fails to respond to said ping.

29. (Currently amended) The system of claim 28 further comprising self-configuration means for providing automated configuration of each of said application controllers on said communications network, said self-configuration means including means for conveying said controller type of said application controller from said application controller to said control interface, said self-configuration means further including means for configuring said application controller based on said profile corresponding to said controller type of said application controller.

30. (Original) The system of claim 29 wherein each of said application controllers includes an occupancy status;

said interface controller including a means for grouping said application controllers into occupancy groups; and

said interface controller further including means for defining as a group said occupancy status of each of said application controller is a given group.

31. (Currently amended) The system of claim 30 wherein said control interface includes:

means for calculating a person count for at least one of said groups based on access entry and access exit information received by said control interface from an access control unit;

means for defining said occupancy status of said application controllers within said group based on said person count.

32.-66. (Cancelled)

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